

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Scott J. Broussard, Ying Liu, Eduardo N. Spring		
Assignee:	International Business Machines Corporation		
Title:	Method and System for Grid-Enabled Virtual Machines With Distributed Management of Applications		
Serial No.:	10/762,000	Filing Date:	January 21, 2004
Examiner:	Jennifer N. To	Group Art Unit:	2195
Docket No.:	AUS920030872US1	Customer No.:	65362

May 21, 2009

Filed Electronically

**PRE-APPEAL BRIEF REQUEST FOR REVIEW
AND STATEMENT OF REASONS**

Sir:

Applicants request review of the Final Office Action in this application. No amendments are being filed with the request. This request is being filed with a Notice of Appeal and a Petition for Extension of Time. The following sets forth a succinct, concise, and focused set of arguments for which the review is being requested.

CLAIM STATUS

Claims 1, 5-9, 13-17, and 21-24 are pending. Claims 9 and 13-16 are rejected under 35 U.S.C. § 101 as directed to non-statutory matter. Claims 1, 5-9, 13-17, and 21-24 are rejected under 35 U.S.C. § 103(a) over Rietschote, U.S. Patent No. 7,203,944 (Rietschote) in view of Zhu et al., "Jessica2: A Distributed Java Virtual Machine with Transparent Thread Migration Support," IEEE, 2002, pages 381-388 (Zhu).

REMARKS

Claims 9 and 13 – 17 are allowable over 35 U.S.C. § 101.

In the Response filed on October 29, 2008, claims 9 and 17 were amended to affirmatively set forth that the computer program product (claim 9) and the apparatus (claim 17) are executed by a data processing system. Based upon this amendment the computer program

product and apparatus are more limited than the computer readable medium disclosed within the specification. Accordingly, claims 9 and 13 – 17 are statutory.

Should the examiner believe that further amendment is necessary, application would be willing to amend the definition within the specification to remove the language to which the examiner objects.

Claims 1, 5 – 9 13 – 17 and 21 – 24 are allowable over Rietschote and Zhu.

Rietschote generally disclose a cluster of computer systems where the computer systems may include virtual machines. (See e.g., Rietschote, Col. 2, lines 46 – 65.). Rietschote discloses that the virtual machine resource may be failed over in response to detection of a failure. However, there is no disclosure in Rietschote of sharing information about a plurality of virtual machines within the virtual machine cluster such that a virtual machine may be added to the virtual machine cluster or such that a virtual machine may be removed from the virtual machine cluster as the plurality of virtual machines continues to run or of determining that a CPU load utilization on a first virtual machine exceeds a threshold value and moving a thread from the first virtual machine to a second virtual machine during a load-balancing operation in response to the first virtual machine exceeding the threshold value. This deficiency of Rietschote is not cured by Zhu.

Zhu discloses a distributed Java Virtual Machine which includes a thread migration mechanism to enable dynamic load balancing by migrating Java threads between cluster nodes at runtime without programmers' involvement. There is no disclosure in Zhu of determining that a CPU load utilization on a first virtual machine *exceeds a threshold value and moving a thread from the first virtual machine to a second virtual machine during a load-balancing operation in response to the first virtual machine exceeding the threshold value.*

Accordingly, Rietschote or Zhu, taken alone or in combination, do not disclose or suggest determining that a CPU load utilization on a first virtual machine exceeds a threshold value and moving a thread from the first virtual machine to a second virtual machine during a load-balancing operation in response to the first virtual machine exceeding the threshold value, all as required by claim 1 and as substantially required by claims 9 and 17. Accordingly, claims 1, 9 and 17 are allowable over Rietschote and Zhu. Claims 5 – 8 depend from claim 1 and are

allowable for at least this reason. Claims 13 – 16 depend from claim 9 and are allowable for at least this reason. Claims 21 – 24 depend from claim 17 and are allowable for at least this reason.

CONCLUSION

In view of the remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned at 512-338-9100.

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being electronically submitted to the COMMISSIONER FOR PATENTS via EFS on May 21, 2009.

/Stephen A. Terrile/

Respectfully submitted,

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